

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**FOIL when  $A \neq 1$  SLTN (version 119)**

**FOIL the expressions shown below:**

1.  $(-3x + 6)(-2x - 2)$

$$\begin{aligned} &(-3)(-2)x^2 + (-3)(-2)x + (6)(-2)x + (6)(-2) \\ &(6)x^2 + (6)x + (-12)x + (-12) \\ &6x^2 - 6x - 12 \end{aligned}$$

2.  $(-5x - 6)(4x - 2)$

$$\begin{aligned} &(-5)(4)x^2 + (-5)(-2)x + (-6)(4)x + (-6)(-2) \\ &(-20)x^2 + (10)x + (-24)x + (12) \\ &-20x^2 - 14x + 12 \end{aligned}$$

3.  $(-3x + 5)(3x + 5)$

$$\begin{aligned} &(-3)(3)x^2 + (-3)(5)x + (5)(3)x + (5)(5) \\ &(-9)x^2 + (-15)x + (15)x + (25) \\ &-9x^2 + 25 \end{aligned}$$

4.  $(9x + 7)(4x - 9)$

$$\begin{aligned} &(9)(4)x^2 + (9)(-9)x + (7)(4)x + (7)(-9) \\ &(36)x^2 + (-81)x + (28)x + (-63) \\ &36x^2 - 53x - 63 \end{aligned}$$

5.  $(8x + 7)(-6x - 4)$

$$\begin{aligned} &(8)(-6)x^2 + (8)(-4)x + (7)(-6)x + (7)(-4) \\ &(-48)x^2 + (-32)x + (-42)x + (-28) \\ &-48x^2 - 74x - 28 \end{aligned}$$

**FOIL the expressions shown below:**

6.  $(7x - 8)(-3x - 5)$

$$\begin{aligned}(7)(-3)x^2 + (7)(-5)x + (-8)(-3)x + (-8)(-5) \\ (-21)x^2 + (-35)x + (24)x + (40) \\ -21x^2 - 11x + 40\end{aligned}$$

7.  $(-8x - 7)(3x - 6)$

$$\begin{aligned}(-8)(3)x^2 + (-8)(-6)x + (-7)(3)x + (-7)(-6) \\ (-24)x^2 + (48)x + (-21)x + (42) \\ -24x^2 + 27x + 42\end{aligned}$$

8.  $(9x - 9)(-7x - 8)$

$$\begin{aligned}(9)(-7)x^2 + (9)(-8)x + (-9)(-7)x + (-9)(-8) \\ (-63)x^2 + (-72)x + (63)x + (72) \\ -63x^2 - 9x + 72\end{aligned}$$

9.  $(-6x - 3)(-2x + 4)$

$$\begin{aligned}(-6)(-2)x^2 + (-6)(4)x + (-3)(-2)x + (-3)(4) \\ (12)x^2 + (-24)x + (6)x + (-12) \\ 12x^2 - 18x - 12\end{aligned}$$

10.  $(6x + 3)(-8x - 4)$

$$\begin{aligned}(6)(-8)x^2 + (6)(-4)x + (3)(-8)x + (3)(-4) \\ (-48)x^2 + (-24)x + (-24)x + (-12) \\ -48x^2 - 48x - 12\end{aligned}$$